



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE
OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION
FOR THE ADVANCEMENT OF SCIENCE

FRIDAY, JULY 3, 1903

CONTENTS

<i>The Teaching of Mathematics:</i> CHARLES OTTERMANN	1
<i>The Ideal University Administration:</i> PROFESSOR WILLIAM KENT	8
<i>The International Catalogue of Scientific Literature:</i> LEONARD C. GRUNNELL	10
<i>The Indian Institute of Science</i>	12
<i>The Order of the Contents of SCIENCE</i>	14
<i>Scientific Notes and News</i>	14
<i>University and Educational News</i>	17
<i>Discussion and Correspondence:—</i>	
<i>The American Society of Naturalists:</i> DR. H. McE. KNOWER. <i>News from Kilauea:</i> PROFESSOR C. H. HITCHCOCK	18
<i>Scientific Books:—</i>	
<i>Hildebrandt on "Air-ships Past and Present:</i> DR. O. CHANUTE. <i>Getman's Laboratory Exercises in Physical Chemistry:</i> PROFESSOR W. LECONTE STEVENS. <i>Mitchell's Mosquito Life:</i> PROFESSOR JOHN B. SMITH	20
<i>Scientific Journals and Articles</i>	23
<i>Notes on Entomology:</i> DR. NATHAN BANKS	24
<i>Special Articles:—</i>	
<i>Regions of Maximum Ionization due to Gamma Radiation:</i> PROFESSOR CARL BARUS. <i>A New Method of Enumerating Bacteria in Air:</i> PROFESSOR C. E. A. WINSLOW	26
<i>Societies and Academies:—</i>	
<i>New York Academy of Sciences, Section of Astronomy, Physics and Chemistry:</i> PROFESSOR WILLIAM CAMBELL. <i>The Chemical Society of Washington:</i> J. A. LE CLERC ..	31

MSs. intended for publication and books, etc., intended for review should be sent to the Editor of SCIENCE, Garrison-on-Hudson, N. Y., or during the present summer to Wood's Hole, Mass.

THE TEACHING OF MATHEMATICS¹

As mathematical pedagogy is receiving increasingly marked attention in this country, a brief account of the reforms recently proposed by Professor Felix Klein, of Germany, may be of general interest.²

The three types of German higher schools leading up to the university are the Gymnasium, the Real Gymnasium and the Ober Real Schule, corresponding roughly to the classical, Latin scientific and scientific courses in American high schools. Until recently, the university could only be entered through the portals of the gymnasium. This exclusive privilege might be termed the gymnasial monopoly, and even yet the gymnasium is the school of the aristocrat.

However, as a result of the Berlin Conference of 1900 and the emperor's decree of the same year, the three schools were placed on an equal footing and each per-

¹ Prepared by the author in connection with a course on the History and Teaching of Mathematics, given by Professor S. E. Slocum at the University of Cincinnati. For reports prepared by other members of the class see article soon to appear in the *Educational Review*.

² "Über eine zeitgemässe Umgestaltung des mathematischen Unterrichts an den höheren Schulen," F. Klein. "Bermerkungen im Anschluss an die Schulkonferenz von 1900," F. Klein. "Hundert Jahre mathematischer Unterricht an den höheren preussischen Schulen," F. Klein. "Über das Lehrziel im mathematischen Unterricht der höheren Lehranstalten," E. Götting. Collected in "Neue Beiträge zur Frage des mathematischen und physikalischen Unterrichts an den Höheren Schulen," Klein u. Riecke, Teubner, 1904.